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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,595	10/17/2000	Michael O. Okoroafor	1636A1	2590
24959	7590	11/27/2007	EXAMINER	
PPG INDUSTRIES INC			PENG, KUO LIANG	
INTELLECTUAL PROPERTY DEPT			ART UNIT	PAPER NUMBER
ONE PPG PLACE			1796	
PITTSBURGH, PA 15272				

  

MAIL DATE	DELIVERY MODE
11/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/690,595	OKOROAFOR ET AL.
Examiner	Art Unit	
Kuo-Liang Peng	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 9/6/07 Amendment.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 7-13, 24, 30-36, 56-93 and 95-97 is/are pending in the application.
- 4a) Of the above claim(s) 56-93, 96 and 97 is/are withdrawn from consideration.
- 5) Claim(s) 24 and 95 is/are allowed.
- 6) Claim(s) 7-13, 30-36 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

1. The Applicants' amendment filed September 6, 2007 is acknowledged. Claims 1-6, 14-23, 25-29, 37-55 and 94 are deleted. Claims 7-13, 24, 30-36 and 95 are amended. Claims 56-93 and 96-97 are withdrawn. Now, Claims 7-13, 24, 30-36 and 95 are pending for consideration.
2. Claim objection(s) in the previous Office Action (Paper No. 052607) is/are removed.
3. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 052607) is/are removed.
4. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 7-13 and 30-36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In Claims 7 and 30, Examiner is not able to find a basis of a polymerizable organic composition or the polymerizate thereof utilizing a first monomer derived from a precursor thereof where a **polyamine** recited in the instant claims are used to react with an **isocyanate** or an **isothiocyanate** such that **thiourethane** linkages or **dithiourethane** linkages are formed.

7. Claims 7-13 and 30-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 7 and 30, it is not clear as to how the thiourethane linkages or the dithiourethane linkages are formed.

Claims 11 and 34 recite the limitation “SH”, “OH”, “-NH-” in lines 2-3.

There is insufficient antecedent basis for this limitation in the claim.

In Claims 12 (page 7, 1<sup>st</sup> line) and 35 (lines 7-8), “**and mixtures thereof**” causes confusion because it is not clear as to whether the mixture of the three compounds or individual compound are/is used in the instant claims.

***Responsive to arguments regarding 35 USC § 102 and 103 rejection***

8. Applicant's arguments filed September 6, 2007 have been fully considered but they are not persuasive (except for Claims 24 and 95) because of the rejections set forth above.

***Allowable Subject Matter***

9. Claims 24 and 95 are allowed.

10. The following is an examiner's statement of reasons for allowance:

The present claims are allowable for at least the following reason(s) over the closest references: Miranda (US 3 600 359) and Kobayashi (US 5 916 987)

None of Miranda and Kobayashi teaches or fairly suggests the claimed composition and polymerize thereof.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is

(571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp  
November 21, 2007



Kuo-Liang Peng  
Primary Examiner  
Art Unit 1796